

IN THE CLAIMS:

Please amend claim 1 as follows.

1. (Currently Amended) A network switch for switching packets from a source to a destination, said network switch including:

a source port for receiving an incoming packet from a source;

a destination port which contains a path to a destination for the packet; and

a programmable counter unit for counting a number of packets of selected packet types which are received by the switch wherein the programmable counter unit includes a rules table therein, said rules table storing rules which control packet flow based on values set in fields of a selected packet type, after a number of counted packets of a selected packet type exceeds a predetermined threshold, and

wherein said rules table comprises a counter field, a filter value field, and a filter select field.

2. (Original) A network switch as recited in claim 1, wherein said programmable counter unit comprises a filter unit which parses selected fields of an incoming packet and compares the selected field to a table to determine whether the incoming packet is of a selected packet type.

3. (Original) A network switch as recited in claim 1, further comprising:
a CPU interface for connecting the network switch to a remote CPU, wherein said remote CPU is used to program the programmable counter unit.

4. (Original) A network switch as recited in claim 1, said network switch further comprising:

an internal memory for storing first selected incoming packets therein;

a memory management unit comprising an external memory interface for interfacing with an external memory, said external memory interface being configured to send second selected incoming packets to the external memory; and

a communication channel for communicating data and messaging information between the source port and the destination port, the internal memory, and the memory management unit.

5. (Cancelled)

6. (Previously Presented) A network switch as recited in claim 1, wherein said programmable counter unit is configured to provide separate counts of a plurality of different types of incoming packets, and take different action based upon different count values for the different packet types.

7. (Previously Presented) A network switch as recited in claim 1, wherein the fields of the selected packet type include a new code point action field.

8. (Previously Presented) A network switch for switching packets from a source to a destination, said network switch including:

a source port for receiving an incoming packet from a source;

a destination port which contains a path to a destination for the packet; and

a programmable counter unit for counting a number of packets of selected packet types which are received by the switch wherein the programmable counter unit includes a rules table therein, said rules table storing rules which control packet flow based on values set in fields of a selected packet type, after a number of counted packets of a selected packet type exceeds a predetermined threshold;

wherein the fields of the selected packet type include a new code point action field; and

wherein the new code point action field may be set to a value for one of no action, assign a new code point, assign the new code point and change the priority of the selected packet, and drop the packet.

9. (Previously Presented) A network switch as recited in claim 8, wherein if the value for the new code point action field indicates assign the new code point, a class of service is changed for the selected packet.